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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,654	01/11/2000	John A. Lawton	PM-263288-D1029	5938

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EXAMINER

HAMILTON, CYNTHIA

ART UNIT PAPER NUMBER

1752

DATE MAILED: 01/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

09/481,654

Applicant(s)

LAWTON ET AL.

Examin r

Cynthia Hamilton

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-- Th MAILING DATE of this communication app ars n the cov r sh et with the c rrespondence address --

## P riod for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8/15/02, 7/15/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-77 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-77 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. DETAILED ACTION

2. The request filed on August 15, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09-481,654 is acceptable and a CPA has been established. An action on the CPA follows.

3. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

4. The examiner notes for the record that the processes of claims 75-77 are newly examined and were not present at the time of the Final rejection of April 26, 2002. They have been presented since that date.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 75- 77 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. To form compositions usable at relative humidity from 40 to 80%, i.e. 50% as in instant claims, applicants state on page 8, lines 56-66, that the equivalent weight ratio of epoxy to polyol be above 3.5 and the water content of the composition be above 0.75%, so these two features and the third feature that a polyol be present are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). There is enabling disclosure for any other composition that would work satisfactorily at 50% relative humidity in the application.

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7. Claims 75-77 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows:

The processes of instant claims 75-77 add new matter to the patent by adding to the disclosure a generic process of only processing compositions at relative humidity of 50% without the added essential parts of the composition disclosed as necessary for such a process. To form compositions usable at relative humidity from 40 to 80%, i.e. 50% as in instant claims, applicants state on page 8, lines 56-66, that the equivalent weight ratio of epoxy to polyol be above 3.5 and the water content of the composition be above 0.75%, so these two features and the third feature that a polyol be present are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. The non enabled process is also a more generic process than any actually disclosed by applicants. On page 8, there is description of an equilibration step necessary for processing at high humidity. This also is not part of the generic process of claims 75-77.

8. Applicant is reminded of the continuing obligation under 37 CFR 1.178(b), to timely apprise the Office of any prior or concurrent proceeding in which Patent No. 5707780 is or was involved. These proceedings would include interferences, reissues, reexaminations, and litigation.

Applicant is further reminded of the continuing obligation under 37 CFR 1.56, to timely apprise the Office of any information which is material to patentability of the claims under consideration in this reissue application.

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These obligations rest with each individual associated with the filing and prosecution of this application for reissue. See also MPEP §§ 1404, 1442.01 and 1442.04.

9. Claims 1-70 would be allowable with the submission of a supplemental Declaration.
10. Applicants are given notice that allowance of this application will required a Supplemental Declaration for Reissue and correction of the missing zip code for Jonathoan V. Casper as well as meeting the requirements of 37 CFR 1.175 at time of allowance.
11. Claims 1-77 are rejected as being based upon a defective reissue Declaration under 35 USC 252. The oath does not now set forth the error and correction as currently made. See 37 CFR 1.175 (b) (1). All claims stand or fall together under the issue of a defective reissue Declaration.
12. Applicants have set forth that claim 72 is previous claim 73, claim 73 is previous claim 75 and claim 74 is previous claim 77. Claim 71 has been amended.
13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
14. Claims 71-74 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohkawa et al as evidenced by data sheets submitted by applicants. See Examples 5-6 and 10 in Ohkawa et al

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wherein the mixture of epoxides inherently possesses the properties of cure and viscosity set forth in the instant claims. With respect to water as a percentage specific component, the examiner holds that very small percentages of water would be present in the compositions of Ohkawa et al. This is further evidenced by data sheets of published information with respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent Application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. The data sheets show at 32% humidity there is up to 1.1% water present. Thus, using the compositions of Ohkawa et al at ambient conditions such as a humid summer day would yield the instant compositions as evidenced by the Data sheets.

15. Claims 71-74 are rejected under 35 U.S.C. 102(e) as being anticipated by Steinmann et al (5,476,748) or under 35 USC 102(b) as being anticipated by Steinmann et al (CA 2,111,718) as evidenced by data sheets submitted by applicants. See particularly Examples 12-14 in either Steinmann et al which are derived from the same Swiss application. With respect to instant claims 71-74, Steinmann et al discloses all the instant composition and the use of the composition in stereolithographic methods of moldings as set forth in the first few paragraphs of either reference. With respect to water as a percentage specific component, the examiner holds that very small percentages of water would be present in the compositions of Steinmann et al. This is further evidenced by data sheets of published information as set forth as percentage of water present as equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent application 08/476,452 as evidence to the issue of water

presence problem in stereolithographic resins. See also col. 4, lines 7-8, col. 9, lines 5-8 in Steinmann et al (5,476,748).

16. Claims 71-72, 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Land (4,694,029) as evidenced by RN 25085-98-7 and data sheets submitted by applicants. See Example 3, Compositions 5-6. The compositions used by Land inherently possess the properties required in instant claims 71-72 and 74. UVR-6110 is identified by RN 25085-98-7 as the same compound as Cyracure Resin UVR-6105 used by applicants. Epon 828 is inherently the higher viscosity, slower polymerizing epoxy when matched with UVR-6110. With respect to water as a percentage specific component, the examiner holds that very small percentages of water would be present in the compositions of Land due to absorption of water from a humid atmosphere and that this is in the range of water designated present by the instant composition. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applications in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. Thus, the compositions of Land also anticipate the instant invention.
17. Claims 71-72 and 74 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsao et al in view of data sheets. See Examples in Tsao et al. The compositions used by Tsao et al inherently possess the properties required in instant claims 71-72 and 74. In Tsao et al, see especially Example 2, formulation 6, wherein the epoxy mixture is 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate, i.e. a cycloaliphatic epoxy, and diglycidyl ether of bisphenol A. One epoxy is inherently more viscose and of slower polymerizing rate. The blend of radically polymerizable components used by Tsao et al in

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Example 2, formulation 6 is comprised of diethylene glycol diacrylate, trimethylolpropane triacrylate and 2 ethyl hexyl acrylate. The photo generating acid precursor in Tsao et al is triphenyl sulfonium hexafluorophosphate and the free radical initiator is phenyl acetophenone. With respect to water as a component, the examiner holds that very small percentages of water would be present in the composition of Tsao et al due to absorption of water from a humid atmosphere and that this is inherently within the instant range claimed when used at ordinary working conditions. This is further evidenced by data sheets of published information respect to the percentage of water present at equilibration of SL resins, i.e. similar epoxy resins used in Stereolithography submitted by applicants in parent application 08/476,452 as evidence to the issue of water presence problem in stereolithography resins. Thus, the compositions of Tsao et al inherently anticipate the instant invention.

18. Applicant's arguments filed July 15, 2002 have been fully considered but they are not persuasive. Applicants address only humidity of 15% with respect to the issue of water presence inherent in the prior art compositions. The Sheets show tests at 32%, 53% and 64% with water concentrations of up to 2.9% and from 0.9% . Thus, the ranges of water present are still held to fall within the ranges in the instant claims. Applicants have not addressed these other humidity points. Thus, applicants have not shown the compositions in Tsao et al, Land, Steinmann et al and Ohkawa et al do not under ordinary operating conditions have the water percentages claimed. The data sheets suggest less than 50% humidity. 32% is less than 50%. The rejections stand.

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cynthia Hamilton whose telephone number is (703) 308-3626. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.*

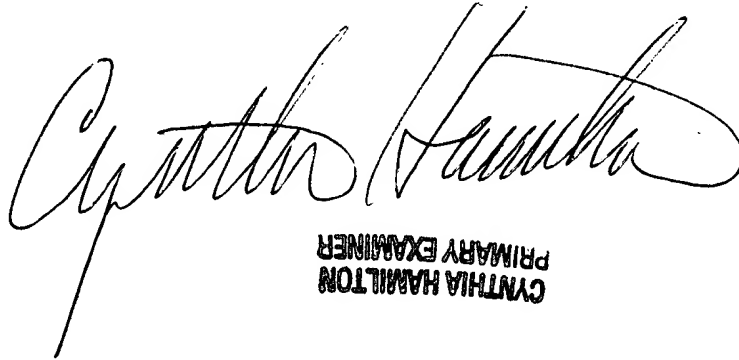


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*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on (703) 308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.*

*Any inquiry of papers not received regarding this communication or earlier communications, or of a general nature or relating to the status of this application or proceeding should be directed should be directed to the Customer Service Center of Technology Center 1700 whose telephone number is (703) 306-5665.*

Cynthia Hamilton  
December 12, 2002



CYNTHIA HAMILTON  
PRIMARY EXAMINER